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(56) Documents Cited

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INT CL<sup>7</sup> A63F, G07F 17/32 17/34

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(54) Abstract Title

**An entertainment machine**

(57) An entertainment machine 1 arranged to be played by at least one user and to provide a game of strategy in which the user makes at least one move comprises a display 4, processing circuitry 22 to provide the game and display it on said display 4, and at least one user operable input 6, 8, 10 to the processing circuitry 22. The processing circuitry 22 enters a selection routine before a user can make a move in predetermined situations in the game, such that the outcome of the selection routine can be used to determine the next move in the game. The selection routine may require a user to predict the outcome of a HI/LO game or a roll of at least one dice. In an alternative embodiment the invention comprises a network of two or more entertainment machines. The game of strategy may include games such as connect4, othello, chinese checkers, noughts and crosses, card games requiring skill, patience, draughts, chess, pairs. In a further embodiment a computer readable medium has stored thereon instructions for causing an entertainment machine to function as claimed in claim 1-25. In another embodiment a propagated signal is arranged to program a processing circuitry to execute the method of any of claims 26-34.

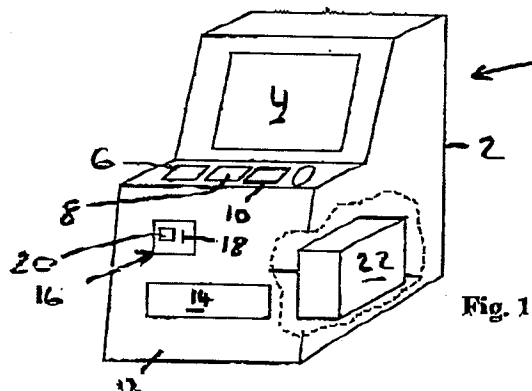


Fig. 1

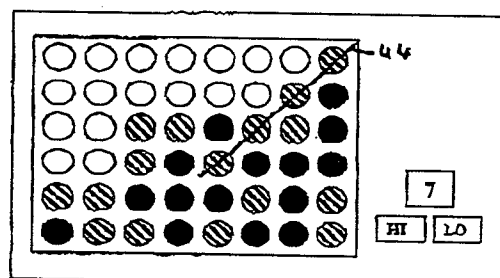


Fig. 6

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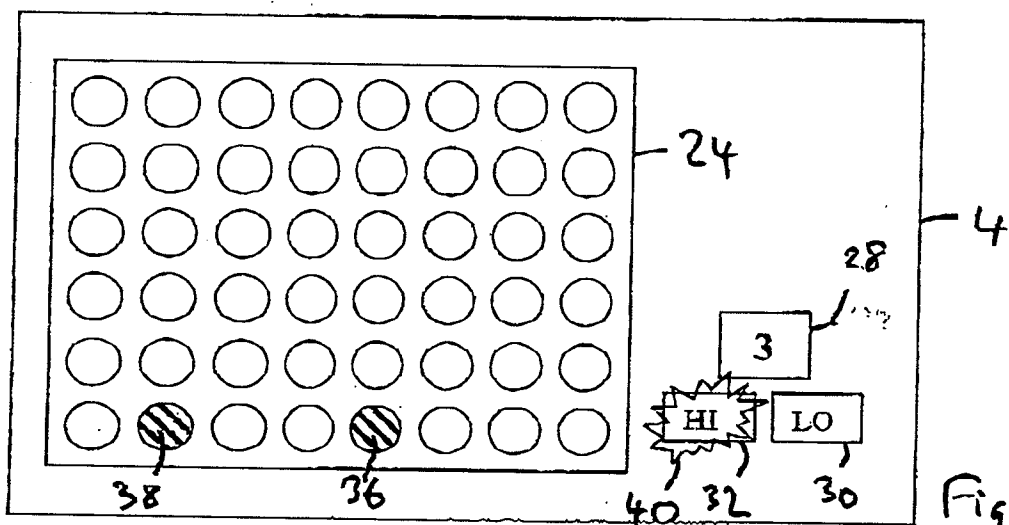


Fig. 4

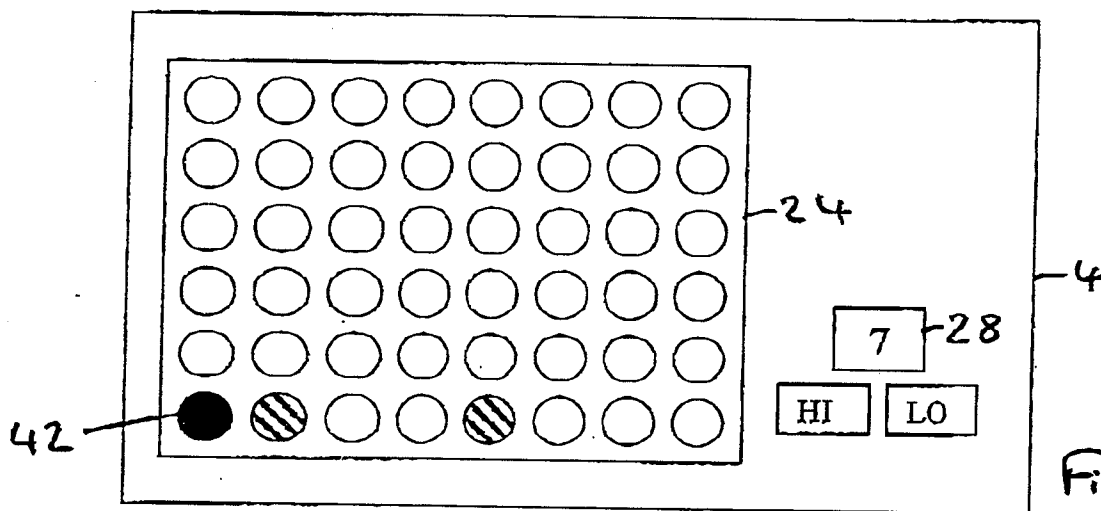


Fig. 5

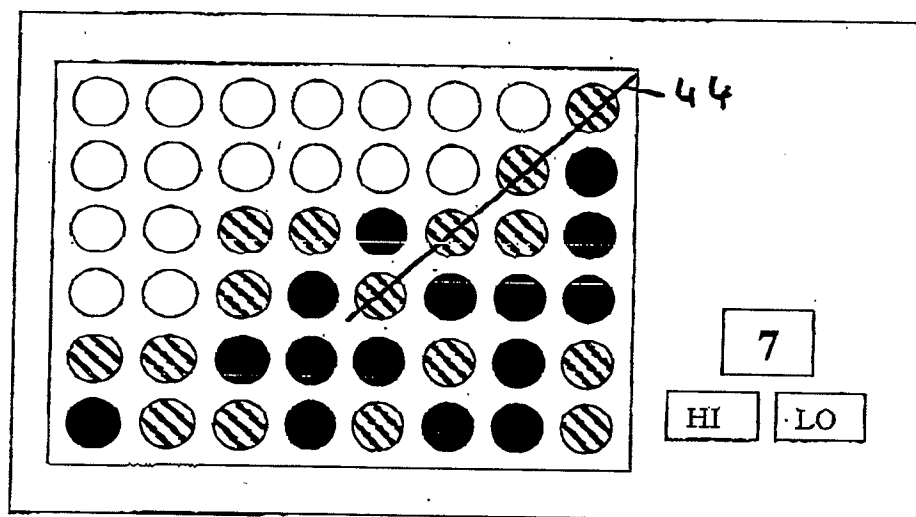
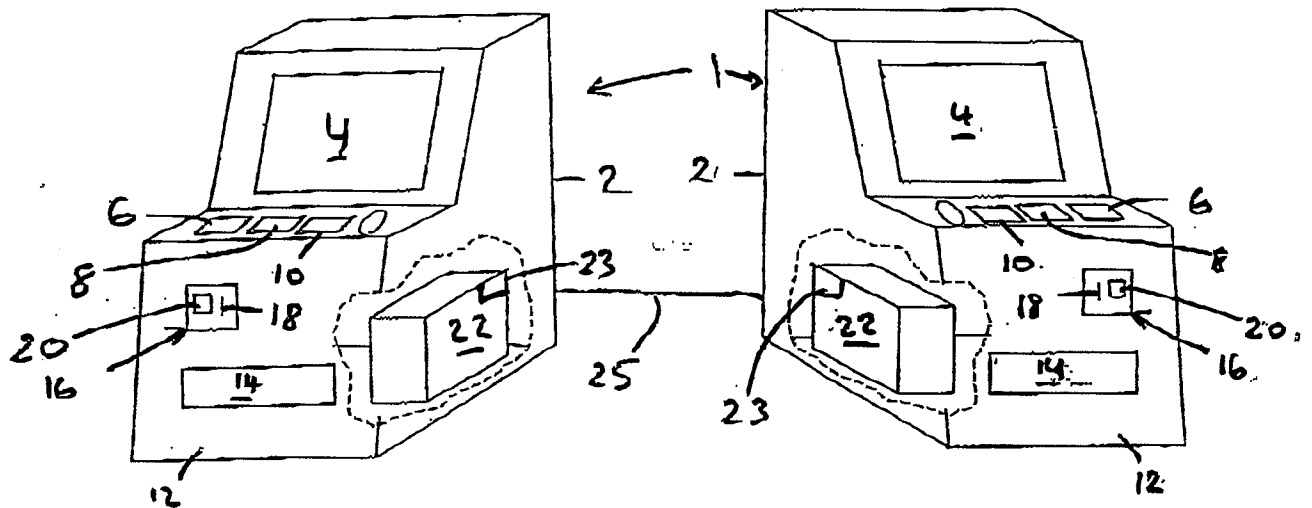
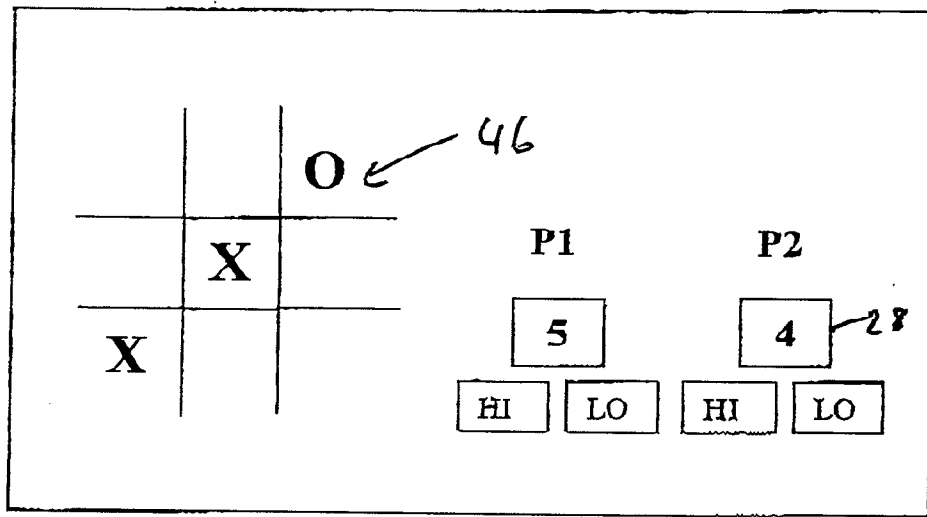


Fig. 6

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provided. This includes games such as connect4, othello, noughts and crosses. many card games requiring skill, Chinese checkers, boxes, patience (card game), draughts (or checkers). chess, pairs.

- 5 The games mentioned in the preceding paragraph can be referred to as games of strategy, which rely on the tactical ability of a player rather than their hand eye co-ordination, dexterity, etc. The skilled person will appreciate the nature of such games.
- 10 Further, a game of strategy may also be defined as a game in which play follows a set of predetermined rules, such that once play has commenced play follows these rules without a random element determining the flow of play. That is the games rely on players making a response to the state of the game within the constraints of the rules. Traditionally, a random
- 15 element is an occurrence such as a dice roll, etc.

It is therefore an object of the invention to provide an entertainment machine that helps to overcome the problems discussed.

- 20 According to a first aspect of the invention there is provided an entertainment machine arranged to be played by at least one user and to provide a game of strategy in which a user makes at least one move, the machine comprising a display, processing circuitry arranged to provide the game and display it on said display, and at least one user operable
- 25 input to the processing circuitry, wherein the processing circuitry is arranged to enter a selection routine before a user can make a move in predetermined situations in the game.

- An advantage of such a machine is that it can be used, via the selection
- 30 routine, to introduce a degree of control of the game allowing the machine to meet the required legislation.

In one embodiment the processing circuitry is arranged such that a user playing the machine can play all of the player roles required by the machine. The processing circuitry may be arranged to require the user to play both roles in a game for two players (for example noughts and  
5 crosses).

Alternatively, or additionally, the processing circuitry may be arranged to take inputs from more than one user and so allow a plurality of users to play a game on the machine. In such circumstances, the processing  
10 circuitry may or may not be arranged to play the game on behalf of one or more players. For example the processing circuitry may be arranged to take inputs from two users and play the role of a third player therefore providing a three-player game. Alternatively, the processing circuitry may be arranged to take inputs from two users and not take a role itself,  
15 thus providing a two-player game.

If the processing circuitry is arranged to take inputs from more than one user it may be arranged to require each user to take turns in making their input.  
20

The machine may be arranged to indicate which user is required to make an input. In order to provide such indication the machine may be arranged to cause a light to flash, to display an indication on the display, to make an announcement to the players via a speaker, or any other  
25 suitable way of providing instruction.

The predetermined situations in which the processing circuitry is arranged to use the selection routine may be any one, or any combination of the following situations: before each and every move made by a particular  
30 user; before a move in which a prize can be won by a user; before moves

he/she may win the guess, and if he/she guesses incorrectly then he/she may lose the guess.

Further, an arrangement may be provided that requires a user to make an  
5 input to the machine when an indicator is at a predetermined position. For example the indicator may be a bar of varying length, or may be a series of flashing lights, or the like.

Indeed, an arrangement may be provided that simulates, or provides, any  
10 situation in which a user is perceived to be able to use his/her skill in order to determine the outcome. If the user believes that they can use his/her skill in order to determine the next move (for example by winning a high/low gamble) then he/she may be more willing to play. It will be appreciated by the skilled person that the outcome of such gambles can in  
15 reality be under the control of the processing circuitry. Therefore, the processing circuitry can control whether or not a user wins a game, and consequently, the machine can meet the pay-out ratios that it is required to meet by legislation.

20 The selection routine providing arrangement may be arranged such that the outcome of the selection routine determines which player's counter is added to the game in progress. In one embodiment the symbols provided by the selection routine are provided in a plurality of colours, and the colour of the next symbol determines the counter that will be next added  
25 to the game. For example in a game requiring a first and a second player, the symbols of the selection routine may be provided in two colours such that counters added to the game can be of the first or second player.

The processing circuitry may be arranged such that if the outcome of the  
30 selection routine is in favour of a user then any, or any combination, of the following situations may occur: a counter is added to the game that

Network WAN, a wireless network, or the like. For example, the connection means may be a MODEM, a network adapter, or the like.

5 According to a second aspect of the invention there is provided a method of controlling an entertainment machine providing a strategy game comprising providing a user with a selection routine allowing them to determine the next move in the game according to the outcome of the selection routine, the selection routine requiring the user to predict the outcome of an event.

10

An advantage of such a method is that it can help the machine tailor its pay-out to meet that required by legislation, since the machine can control the outcome of the event of which the user is predicting the outcome.

15 In one embodiment the user may be required to predict the outcome of a high low gamble. In other embodiments the user may be required to predict the outcome of the roll of at least one dice. In yet a further embodiment the user may be required to make an input to the processing circuitry when a varying indicator is at one or more predetermined  
20 positions. In yet further embodiments a reel may be provided wherein a user must guess where the reel will stop once spun, or where a ball will stop on the reel (e.g. a roulette wheel). Further; a user may be required to guess the outcome of the toss of a coin.

25 The outcome of the selection routine may be used to determine whether the user, or an opponent of the user, has the next move. The skilled person will appreciate that this may mean any one user in the game may have more than one move in a row. If a user loses a selection routine then the next counter added to the game may belong to a player other than that  
30 being played by the user.

According to a fourth aspect of the invention there is provided a computer readable medium having stored thereon instructions for causing processing circuitry to execute the method of the second aspect of the invention.

According to a fifth aspect of the invention there is provided a propagated signal arranged to program a processing circuitry to execute the method of the second aspect of the invention.

Such a propagated signal may be used to program an entertainment machine having the processing circuitry therein via a telephone line, or other data transmitting medium.

There now follows by way of example only a detailed description of the present invention with reference to the accompanying Figures of which:

Figure 1 shows an entertainment machine according to the present invention;

Figures 2 to 6 show schematic representations of screen shots of one embodiment of a machine according to the invention;

Figures 7 to 10 show schematic representations of screen shots of a further embodiment of a machine according to the invention; and

Figure 11 shows a network of two entertainment machines according to the present invention.

The entertainment machine 1 of Figure 1 comprises a cabinet 2 having at top region thereof a display 4 (comprising in this case a CRT screen)



arrangement 26 is used to provide a selection routine that allows the next move in the game to be determined.

5 The game shown in Figures 2 to 6 is a game being played by a single user of the machine, with the other player being provided by the processing circuitry 22 of the machine 1. In the Figures the counters of the machine are striped, and the counters of the user are coloured black.

10 In use, the high low gamble arrangement is arranged to display a symbol in the symbol display 28. In this embodiment the symbol display can be any one of the numbers between 1 and 10 inclusive. In the screen shot of Figure 2 the symbol display 28 shows the numeral 5. In order to play the game a user must guess whether the next symbol to be displayed in the symbol display 28 will be higher or lower than that presently displayed.

15 The user touches the display 4 on the low input region 30 or the high input region 32 to enter his/her guess to the processing circuitry.

If the user guesses correctly then the next counter added to the grid 24 will be coloured in the user's colour, and if the user guesses incorrectly

20 the next counter added to the grid 24 will be coloured in the machine's colour.

As represented by the star 34 around the high input region 32 the user has guessed in this embodiment that the next symbol will be higher than the 5

25 shown in the symbol display 28. However, as can be seen by the screen shot of Figure 3 the next symbol displayed in the symbol display 28 is in fact a 3: lower than the 5 originally displayed. Therefore, the user guessed incorrectly and the counter 36 added to the grid 24 is striped (i.e. belonging to the machine 1). The processing circuitry 22 of the

30 machine 1 has determined in which column of the grid the counter should be added.

this embodiment requires a line of four symbols to be obtained, any number of symbols in a line may be required to obtain a win.

Figures 7 to 10 show a second embodiment of the game in which the machine provides a game of noughts and crosses arranged for two users to play.

The screen shot as shown in Figure 7 shows a noughts and crosses grid 46 together with a first and a second high low gamble arrangement 48, 50, each comprising a symbol display 28, a high input region 32 and a low input region 30. The first high low gamble arrangement 48 is provided for the first user and the second high low gamble arrangement 50 is provided for the second user. (In other embodiments a single high low gamble arrangement may be provided that the two users share).

By some mechanism (not discussed) it has been decided that the second user should have the first move. Therefore, a symbol (the numeral 7) has been displayed in the symbol display 28 of the second high low gamble arrangement 50. As represented by the star 52 around the low input region 30 of the second high low gamble arrangement 50 player two guesses that the next symbol will be lower than the 7 presently displayed by touching the display 4 on the low input region 30.

As shown in Figure 8 the next symbol to be displayed is in fact the numeral 8. and therefore, user two has incorrectly guessed the next symbol. In consequence user one can add a symbol of their own, an "X", to the grid 46. User one selects the area of the grid at which they wish the symbol to be added by touching the display 4 at a corresponding region. In the example shown in Figure 8 user one has touched the central region of the grid 46 and thus the "X" symbol has been added to the central region of the grid.

Although in this embodiment the users have been able to select just where added to the grid 46 is placed (by touching the display 4) it would be equally possible for the processing circuitry 22 to determine just where the next symbol should be placed. Or indeed other input means such as  
 5 the manual switches 6, 8, 10 could be used to specify the placing.

In a further embodiment (not illustrated) the processing circuitry is arranged to provide a two player noughts and crosses game that a single user can play and plays the part of both players. In this embodiment a  
 10 high low gamble arrangement provides the selection routine. The high low gamble arrangement is provided with the numbers between 1 and 12 alternatively coloured in red and green. That is the sequence is arranged as follows: red 1, green 2, red 3, green 4, red 5, green 6, etc.

15 The red numbers are associated with noughts and the green numbers are associated with crosses.

In use the colour of the number displayed determines the symbol that is next added to the board. For example if the symbol displayed is a 6, the  
 20 user may guess that the next symbol to be displayed is lower than this (a low gamble). The machine may for example display a red 1 on the high low gamble arrangement, so that the player wins the gamble. Therefore, the next symbol added to the board is a nought (since the player has won the gamble).

25

However, if the next number displayed by the high low gamble was in fact higher than the green 6, for example a red 7, the player has got the gamble wrong. In this scenario the next symbol added to the board would be a cross since the player had lost the gamble.

30

## CLAIMS

1. An entertainment machine arranged to be played by at least one user and to provide a game of strategy in which the user makes at least one move, the machine comprising a display, processing circuitry arranged to provide the game and display it on said display, and at least one user operable input to the processing circuitry, wherein the processing circuitry is arranged to enter a selection routine before a user can make a move in predetermined situations in the game.
2. The entertainment machine of Claim 1 which comprises a high low gamble (HI/LO) gamble arrangement and arranged such that the outcome of a gamble thereon allows the selection routine to determine the next move in the game.
3. The entertainment machine of Claim 2 in which a plurality of HI/LO gamble arrangements are provided.
4. The entertainment machine of Claim 1 or 2 which comprises a mechanism that simulates the roll of at least one dice and in which the selection routine allows the user to guess the outcome of one or more dice rolls of the or each dice.
5. The entertainment machine of any preceding Claim which is arranged such that the outcome of the selection routine determines which player's counter is added to the game in progress.
6. The entertainment machine of any preceding Claim in which the processing circuitry is arranged such that if the outcome of the selection routine is in favour of the user then a counter, or other piece, is added to the game that belongs to the player being played by the user.

13. The entertainment machine of any preceding Claim in which the processing circuitry is capable of playing the game on behalf of one or more players.
- 5 14. The entertainment machine of Claim 12 or 13 in which a user playing the machine can play the role of more than one player in the game.
- 10 15. The entertainment machine of any preceding Claim in which the processing circuitry is arranged to take inputs from more than one user and so allow a plurality of users to play a game on the machine.
- 15 16. The entertainment machine of Claim 15 in which the machine is arranged to indicate which user is required to make an input.
17. The entertainment machine of any of the preceding Claims in which the processing circuitry is arranged to use the selection routine before each move made by a particular user.
- 20 18. The entertainment machine of any of Claims 1 to 16 in which the processing circuitry is arranged to use the selection routine before a move in which a prize can be won by a user.
- 25 19. The entertainment machine of any of Claims 1 to 16 in which the processing circuitry is arranged to use the selection routine before moves which are made when the ratio of credits paid into the machine by users thereof to credits paid out of the machine does not match predetermined criteria.

26. A method of controlling an entertainment machine providing a strategy game comprising providing a user with a selection routine allowing or appearing to allow them to determine the next move in the game according to the outcome of the selection routine, the selection  
5 routine requiring the user to predict the outcome of an event.

27. The method of Claim 26 in which the entertainment machine is caused to play the part of one of the players required to play the game.

10 28. The method of Claim 27 in which the selection routine is used to determine the next move that the entertainment machine makes on behalf of the players for which it is playing.

29 The method of any of Claims 26 to 28 in which the selection  
15 routine requires a user to predict the outcome of a HI/LO gamble.

30. The method of any of Claims 26 to 28 in which the selection routine requires a user to predict the outcome of the roll of at least one  
20 dice.

31. The method of any of Claims 26 to 28 in which the selection routine requires a user to make an input to the processing circuitry when a varying indicator is at one or more predetermined positions.

25 32. The method of any of Claims 26 to 28 in which the selection routine requires a user to predict the where a reel, or a reel simulation, will stop having been spun.

30 33. The method of any one of Claims 26 to 32 in which the outcome of the selection routine is used to determine whether the user, or an opponent of the user, has the next move.



INVESTOR IN PEOPLE

Application No: GB 0200211.1  
Claims searched: 1-39

Examiner: Kalim Yasseen  
Date of search: 18 June 2002

**Patents Act 1977**  
**Search Report under Section 17**

**Databases searched:**

UK Patent Office collections, including GB, EP, WO & US patent specifications, in:

UK Cl (Ed.T): G4V (VAA)

Int Cl (Ed.7): A63F: G07F (17/32, 17/34)

Other: Online: EPODOC, JAPIO, WPI

**Documents considered to be relevant:**

Category	Identity of document and relevant passage	Relevant to claims
X	GB 2 338 578 A (BILGREY) an amusement apparatus which allows a game of skill to be played if a game of chance is won	at least 1, 7, 24, 26
X	GB 2 320 206 A (SHOWCASE) an amusement apparatus which allows a game of skill to be played if a game of chance is won	at least 1, 7, 24, 26
X	GB 2 313 790 A (SHOWCASE) an amusement apparatus which allows a game of skill to be played if a game of chance is won	at least 1, 7, 24, 26
A	GB 2 305 531 A (DAVID) an example of a fruit machine having HI/LO type game	
X	GB 2 292 246 A (ECLIPSE) an amusement apparatus which allows a game of skill to be played if a game of chance is won	at least 1, 7, 24, 26
X	GB 2 072 395 A (KENNEDY) an amusement apparatus which allows a video game to be played if a game of chance is won	at least 1, 7, 24, 26

X Document indicating lack of novelty or inventive step  
Y Document indicating lack of inventive step if combined with one or more other documents of same category.

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